1925 (H. H. Keifer) in the collections of C.A.S. and Schedl.

The female has the front feebly impressed below, the punctuation much finer, the pubescence longer and more conspicuous, the pronotum more gradually narrowed from the base to the apex and the punctuation of the elytral declivity distinctly coarser.

### Hylocurus tresmariae Schedl, new species

Female.—Reddish brown when mature, 1.34 to 1.46 mm. long, 2.5 times as long as wide. One of the smallest species of the genus as far as Central America is concerned, with long and fine pubescence on the underside. Front broadly convex, impressed on a rather small area below, impression shining, polished, with a few punctures towards the outer margins, the convex portion silky opaque, minutely scratched, finely punctured. Antennal scape clubshaped, with rather long fine hairs. Pronotum about as long as wide, postero-lateral angles rectangular, feebly rounded, sides parallel on the basal two fifths, strongly and obliquely narrowed in front, subapical constriction hardly noticeable, anterior margin rather narrowly rounded; summit high, in the middle, anterior area obliquely convex, finely and not very densely asperate, finely granulato-punctate, pubescence inconspicuous. Scutellum large, shining, impunctate. Elytra feebly wider and 1.5 times as long as the pronotum, of the usual shape, cylindrical to well behind the middle, apex strongly acuminate, declivity short and steeply convex; disc with rows of medium sized but deep punctures in hardly impressed lines, interstices rather narrow, each with a row of minute hardly visible punctures which bear fine slender and erect scalelike hairs; declivity with the interstitial bristles becoming distinctly spatulate, the striae impressed, the strial punctures much more closely placed, the interstices narrowly elevated and the interspacial punctures replaced by regularly arranged granules.

Male.—Rather similar to the female but distinctly stouter, the front more widely and deeply concave and the hairs of the antennal scape more numerous and longer.

Holotype, female, TRES MARIA ISLANDS, MARIA MADRE, VILLAGE, May 15, 1925 (H. H. Keifer) in the California Academy of Sciences, paratypes in the collections of C.A.S. and Schedl.

# FAUNA AETHIOPICA VIII. 144. CONTRIBUTION TO THE MORPHOLOGY AND SYSTEMATICS OF THE SCOLYTOIDEA

(Coleoptera: Scolytoidea)

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Mr. Borys Malkin has collected some Scolytidae and Platypodidae in Angola, in the British Cameroons and in Nigeria during 1948 and 1949. This material has been sent to me by Mr. Hugh B. Leech of the California Academy of Sciences for identification. Besides a good number of known species, the records of which I shall give elsewhere, there have been presented some new species. The descriptions are given below.

## Xyleborus bostrichoides Schedl, new species

Female.—Dark reddish brown, 2.4 mm. long, 2.25 times as long as wide. Xyleborus bostrichoides has to be placed in the Xyleborus scabrati and is easily distinguished from related species by the type of sculpture on the elytra. Front subopaque, plano-convex, densely granulate-punctate, with a few scattered hairs on the frontal face and along the epistomal margin. Pronotum as wide as long, widest at the base, postero-lateral angles but feebly rounded, the sides subparallel, feebly constricted in the basal half, broadly round in front, apical margin with some very low asperities; summit high, in the middle, anterior area steeply convex, densely asperate, the asperities gradually changing over into a granulate-punctate sculpture on the basal area, pubescence fine and sparse. Scutellum rather large, wider than long, shining, polished and impunctate. Elytra feebly wider and 1.66 times as long as the pronotum, widest at the beginning of the declivity, sides fairly straight in the basal three fifths, apex very broadly rounded, declivity beginning short behind the middle, obliquely convex; disc striate-punctate, the striae shallow except the first one on each side, the strial punctures moderate in size, rather closely and regularly placed, the interstices fairly wide, each one with a regular row of somewhat smaller punctures, those of the first two interstices more irregular in arrangement, all interstitial punctures bearing very fine erect hairs; declivity with the second interstices feebly impressed, the suture and the third interstices each with a short row of remotely placed but distinct granules additionally to some punctures, the striae distinct, the strial punctures as large as on the disc, the second interstice rather confusely and coarsely punctured, the apical margin acute and indistinctly crenulate up to the seventh interstices, the pubescence somewhat longer than on the disc.

Holotype and 15 paratypes from Angola: Malange, 11-IX-1949, ex Cassia siamea Lam. (Caesalpiniaceae), B. Malkin collector. (Holotype deposited in California Academy of Sciences.)

## Xyleborus diglyptus Schedl, new species

Female.—Reddish brown, 2.5 mm. long, 2.8 times as long as wide. This new species is rather difficult to place as I do not know any related form but it seems to be advisable to include it into the Xylebori angustati at the present time. Front opaque, minutely punctulate, finely but rather remotely punctured, with a fringe of yellow hairs along the anterior margin only. Pronotum feebly longer than wide (29:26), widest in the middle, postero-lateral angles rounded, feebly diverging in the basal fifth,

thence parallel to little beyond the middle, apex broadly rounded, apical margin with numerous small asperities, summit distinctly before the middle, anterior area convex and very densely covered by small asperities, basal area subshining, very finely punctured, pubescence fine and erect, more dense at the sides. Scutellum moderate in size, as long as wide, shining. Elytra as wide and 1.5 times as long as the pronotum, the sides parallel up to the middle, thence feebly and gradually incurved, the apex rather narrowly rounded, declivity commencing short behind the middle, obliquely convex; disc with rows of very fine but rather distinct punctures, the two sets, those of the principal rows and the others of the interstices difficult to distinguish, the strial punctures bearing minute and inclined hairs, those of the intervalles being much longer and semierect, some of the interstitial punctures replaced by fine granules towards the declivity, declivital face with the striae distinctly impressed, the strial punctures larger than on the disc, each interstice with a series of setose granules, the apical margin up to the seventh interstices not acute but marked by a set of fine toothlike granules, the last ones near the suture situated in continuation of the first interstices a little larger than the others, pubescence more conspicuous on the declivity than on the disc.

Holotype, British Cameroons, Mt. Cameroon, Buea slope, 4500 ft., 13-V-1949 (B. Malkin), in the California Academy of Sciences; paratypes collection Schedl.

## Doliopygus malkini Schedl, new species

Male.—Reddish brown, 3.0 mm. long, 3.5 times as long as wide. More closely allied to Doliopygus uncinatus Schedl but smaller, with the median emargination of the second abdominal sternite more triangular in shape, the lateral processes shorter and stouter. Front flat, separated from the vertex by a subacute angle, frontal face subopaque, minutely punctulate, additionally with some shallow punctures, those more distinct and larger in the upper third, very fine along the more shining epistomal margin, median strigae impressed. Pronotum longer than wide (28:24), lateral emarginations shallow, surface brightly shining, very finely punctate, a few larger punctures along the apical margin. Elytra feebly wider and 1.7 times as long as the pronotum, of the usual general form, sides straight, all alternate interstices terminating into triangular toothlike processes, the first interstice distinctly shorter than the third, the outer ones gradually decreasing in length, the disc with regular rows of fine shallow punctures, the first row only somewhat impressed, the scattered minute punctures of the interstices hardly noticeable; abdomen with the second sternite triangularly and widely emarginate medially, the lateral processes rather high but not long, subperpendicular when viewed from the side, face of the second sternite shining, with a few setose punctures along the sides and some coarser ones around the median emargination. sternites three to five strongly shining, impunctate, the fifth with a shallow depression on each side.

Holotype and 3 paratypes from NIGERIA, OGBOMOSHO, 9-XII-

1949 (B. Malkin); in the California Academy of Sciences; other paratypes are from Kabba, 20-II-49 (B. Malkin).

## Doliopygus ugandae Schedl, new species

Male.—Reddish brown, elytra in the greater part pale yellow, 4.2 mm. long, 3.1 times as long as wide. The two specimens of my collection bear the label Crossotarsus hardenbergi Samps, and have been determined by Sampson himself. The species Crossotarsus hardenbergi Samps, is not valid any more and moreover these two specimens are quite different from all the other allies and easily distinguished by the characters of the 2nd abdominal sternite. Front aplanate, densely punctured, medially with a subimpressed strigae, separated from the vertex by an acute angle, pubescence short and erect. Pronotum distinctly longer than wide (45:38), femoral emarginations shallow, surface shining, rather densely, uniformly and finely punctured, median sulcus long, some short hairs on the sides only. Elytra of the usual shape as common in the Doliopygi conjuncti, feebly wider and 1.7 times as long as the pronotum, regularly striatepunctate, the punctures largely submerged, the striae shallow, the interstices fairly wide, with some minute hardly visible punctures, apex of elytra as in Doliopygus ghesquièri Schedl; abdomen with the second sternit broadly emarginate in the middle, the lateral processes strongly thickened at the upper limit producing an edgelike ridge opposite the upper nearly horizontal margin of the processes, fifth sternite concave, without a toothlike structure.

Holotype male, UGANDA: KAMPALA, MULANGE MABIRA FOREST, 4000 ft., in the Schedl collection.

#### RECENT LITERATURE

THE BLOWFLIES OF CALIFORNIA (Diptera: Calliphoridae). By Maurice

T. James. Bull. Calif. Insect Survey, Vol. 4, No. 1, pp. 1-34, incl. 2 pls.,

1 text fig. Offset printed. University of California Press, Berkeley and Los Angeles; October 28, 1955. Price 50 cents.

Identification keys are given for the subfamilies, genera, and species of Californian calliphorids (adults), with label data in full; larval habits are summarized. The seven figures on two plates show structural details.

THE CARPENTER BEES OF CALIFORNIA (Hymenoptera: Apoidea). By Paul D. Hurd, Jr. Bull. Calif. Insect Survey, Vol. 4, No. 2, pp. 35-72, incl. 6 pls., 4 maps. Offset printed. University of California Press,

Berekeley and Los Angeles; October 28, 1955. Price 50 cents.

This paper is of broader coverage than the title suggests, for the keys and distributional maps are presented for the known species of America north of Mexico. Californian records are given in detail; nesting habits are discussed.—Huch B. Leech, California Academy of Sciences.